

the abdominal cavity. From what was observed, it appears that these spines grew longer as the cæcal cavity grew less, towards the distal end of the fish.

The *Regalecus* appears to be rather a rare fish everywhere, its first recorded occurrence in Britain being in the 'Annual Register' of 1759. Since that time some eleven or twelve specimens have been observed, all on the north-east coast. Its first recorded occurrence in Scotland was of a specimen stranded at the village of Crovie, in Banffshire, in 1844. Another was stranded in the Bay of Cromarty in 1852. The St. Andrews fish, in 1861, makes the third time it has been noticed on the Scottish coast.

IV.—*Descriptions of new Species of Phytophagous Beetles.*

By JOSEPH S. BALLY.

Genus LEMA, Fab.

Lema frontalis.

L. anguste oblonga, subcylindrica, nitida, testacea, pectore antice abdomineque piceis; capite (fronte excepto) nigro; antennis subfiliformibus, articulo ultimo basi fulvo-albo; thorace transverso, subcylindrico, lateribus medio modice constrictis, dorso ante basin transversim sulcato, hic illic fortiter punctato, medio utrinque unifoveolato; elytris viridi-cyaneis, basi vix elevatis, infra basin transversim depressis, sat profunde striato-punctatis, interspatiis lævibus, remote punctatis, ad apicem subelevatis; tibiis extrorsum tarsisque fuscis.

Long. 2–2½ lin.

Hab. Lizard Islands, Northern Australia.

Narrowly oblong, subcylindrical, nitidous, testaceous; anterior part of breast and the abdomen piceous; elytra cyaneous; apical half of tibia, together with the tarsi, nigro-piceous. Head black, with the exception of a large oblong rufous patch on the forehead; face triangular, its lower portion slightly produced; epistome separated from the face by a deep groove, from the apex of which an oblique sulcation runs upwards on either side along the edge of the orbits; upper portion of face coarsely punctured, bilobed; antennæ moderately robust, subfiliform, basal half of apical joint obscure white. Thorax transverse, sides moderately constricted in the middle, the upper surface deeply impressed in front of the base with a transverse sulcation, which extends at either end into the lateral constriction, its middle impressed with a single deep fovea; surface of disk coarsely punctured on the sides in front and down the middle, the latter part impressed on either side by a large deep fovea. Scutellum

longitudinally grooved, its apex obtuse. Elytra much broader than the thorax, oblong, parallel in front, their apex rounded; upper surface transversely depressed below the basilar space, the latter not elevated; each elytron furnished with nine rows of deep coarse punctures, which become, however, finer and less deeply impressed towards the apex; interspaces nearly plane in front, indistinctly wrinkled transversely below the basilar space, thickened and subcostate towards the apex of the elytron. Legs pale testaceous; tarsi, apical half of four anterior tibiæ, together with the extreme apex of the hinder pair, nigro-fuscous; hinder thighs slightly thickened.

Lema Bowringii.

L. elongata, subcylindrica, nitida, subtus nigro-cyanea, argenteo pubescens; capite thoraceque rufo-testaceis, illo pone oculos valde constricto; oculis antennisque subfusiformibus nigris, harum articulis ultimis duobus sordide albis, hoc cylindrico lateribus vix pone medium valde constrictis, ante basin transversim sulcato, sub lente remote punctato; scutello nigro; elytris læte cæruleis, parallelis, basi obsolete elevatis, punctato-striatis, interspatiis antice planis, disco exteriore indistincte transversim corrugatis, ad apicem subcostatis.

Var. *A.* capite thoraceque læte cæruleis, vertice obscure rufo. Long. $2\frac{3}{4}$ -3 lin.

Hab. Pulo-Penang.

Elongate, subcylindrical, nitidous, bluish black beneath, and sparingly clothed with adpressed silvery pubescence; head and thorax rufo-testaceous; elytra deep metallic blue. Head constricted behind the eyes; face triangular, epistome separated from the face by a deep, acutely-angled groove; from its apex two others run obliquely upwards, one on either side, along the edge of the orbit; inner portion of the latter stained with black; labrum piceous; general surface of head minutely and distantly punctured, front impressed with a single distinct fovea: antennæ subfusiform, moderately robust, black, their two terminal joints dusky white, basal joints incrassate, ovate; second short, submoniliform; third and fourth each longer than the first, equal, obconic; four basal joints nitidous, the rest opaque. Thorax subcylindrical, slightly longer than broad; sides broadly and deeply constricted immediately behind their middle, narrowed at the extreme apex, thickened before their apex; upper surface impressed in front of the base by a deep sulcation, which is extended at either end into the lateral constriction; on the centre of the disk are five or six longitudinal rows of fine subremote punctures, visible only with a lens. Scutellum semiovate, obtuse. Elytra much broader than the thorax, parallel, their ba-

silar portion indistinctly elevated; each elytron impressed with ten rows of deep distinct punctures, the outer row sulcate; interspaces plane in front, subcostate towards the apex, each impressed with a row of fine punctures; outer half of external disk obsoletely wrinkled transversely; hinder thighs ampullate, much shorter than the abdomen, moderately incrassate.

Var. A. In this variety the head and thorax (with the exception of an obscure patch on the vertex of the former) are concolorous with the elytra.

Genus COLASPOSOMA, Laporte.

Colasposoma Downesii.

C. anguste oblongum, convexum, metallico-viride; labro, antennis (his extrorsum nigris) pedibusque rufo-fulvis, genibus viridi-æneis, tarsis fuscis; capite thoraceque fortiter subcrebre punctatis; elytris oblongis, subcrebre punctatis, lateribus transversim elevato-reticulatis, intra marginem exteriorem longitudinaliter excavatis, læte cupreis, utroque viridi-æneo limbato.

Long. 3 lin.

Hab. India.

Narrowly oblong, convex. Head and thorax deeply, but not coarsely, punctured; antennæ slender, filiform, two-thirds the length of the body, their basal third rufo-fulvous, the rest black. Thorax more than twice as broad as long, sides rounded, rotundate-angustate in front. Elytra oblong, their sides parallel, more coarsely punctured than the thorax, scarcely broader than the latter; disk transversely impressed below the basilar space.

Genus EURYOPE, Dalm.

Euryope monstrosa.

E. late subquadrato-oblonga, valde convexa, subgibbosa, subnitida, picea; antennis pedibusque pallidioribus; thorace transverso, crebre punctato, dorso subrugoso, utrinque excavato; elytris thorace latioribus, subquadratis, apice obtuse rotundatis, tuberculis magnis elevatis hic illic inter se confluentibus nitide rufo-piceis instructis, interspatiis subremote punctatis.

Long. 4-5 lin.

Hab. Port Natal.

Broadly subquadrate-oblong, convex. Head broad, somewhat closely punctured; epistome transverse, excavated on either side, not distinctly separated from the face, the latter impressed on its upper portion by a broad transverse groove. Thorax twice as broad as long, its surface irregular, deeply excavated on either side; lateral border rounded, narrowly margined, narrowed behind the middle, all the angles produced. Elytra

gibbous behind the middle, thence obliquely deflexed to their apex.

Genus CHRYSOMELA, Linn.

Chrysomela eximia.

C. elongata, convexa, nitida, cæruleo-ænea, abdominis segmentorum marginibus pedibusque læte æneis, supra viridi-ænea; antennis extrorsum, plaga frontali, thoracis basi utrinque ampliata vittaque centrali, scutello elytrorumque sutura vittaque discoïdali læte purpureis; thorace irregulariter punctato, lateribus incrassatis, intra marginem longitudinaliter excavatis, profunde variolosopunctatis; elytris sat fortiter subcrebre punctatis, punctis in striis confusis dispositis, interspatiis aciculatis, irregulariter elevatis, ad apicem subverrucosis.

Var. A. supra cupro-ænea, signaturis viridi-æneis.

Long. 5-6 lin.

Hab. Mantchuria; collected by Mr. Bowring.

Elongate, convex, nitidous; body beneath metallic blue, with a greenish tinge; apical border of the abdominal segments, together with the legs, brassy; body above brassy-green. Head nearly perpendicular; face broad, distinctly punctured; epistome slightly depressed, separated from the face by an angular groove, from the apex of which an ill-defined longitudinal grooved line extends upwards on the face; the surface of the latter on either side this groove is irregularly excavated; vertex with a large purple patch; antennæ scarcely half the length of the body, their outer half purple, and covered with a short adpressed fuscous pubescence. Thorax twice as broad as long; sides moderately amplate-rotundate, nearly straight and obsoletely sinuate at their base; apical margin broadly excavated; upper surface moderately convex, irregularly punctured; sides thickened, longitudinally excavated within, surface of excavated portion covered with large irregularly confluent variolose punctures; a longitudinal vitta down the middle of the disk, and a broad basal fascia, dilated at either end, but abbreviated just before reaching the lateral border, bright purple. Scutellum semiovate, obtuse, bright purple, its surface covered with irregular depressions. Elytra narrowly oblong, slightly broader than the thorax, nearly five times its length; sides subparallel; apex rounded; surface somewhat closely covered with coarse, irregular, deeply impressed punctures, arranged for the most part in irregular longitudinal striæ; general surface of the elytra irregularly thickened, aciculate, subverrucose towards the apex; a sutural line and a broad vitta on the disk, abbreviated at the base, bright purple.

This splendid species is very closely allied to our *Ch. fulgida*, Stephens; it is, however, nearly twice the size, and proportionately

longer than that insect: it also differs in the form of the *ædeagus*.

Chrysomela Wallacei.

C. mas oblonga, parallela, *fæm.* ovata, postice ampliata, convexa, cuprea, nitida, subtus obscurior, purpureo tincta; antennis dimidio corporis longioribus, nigris, articulis basalibus subtus piceis; thorace modice convexo, disco tenuiter punctato, lateribus rotundatis incrassatis, intra marginem longitudinaliter excavatis et ibi profunde varioloso-punctatis; elytris *maris* parallelis, *fæm.* postice ampliatis, valde convexis, subcrebre tenuiter punctatis, punctis in striis confusis irregulariter dispositis.

Long. $3\frac{1}{2}$ —5 lin.

Hab. Mantchuria.

Oblong and parallel in the *male*, ovate and enlarged towards the posterior extremity in the *female*, convex, shining cupreous, more obscure beneath, with a purple tinge. Head punctured; epistome depressed, bounded above by an acutely-angled grooved line, either end of which is suddenly rounded, and from its apex a faint longitudinal groove runs upwards to the vertex; antennæ rather slender, nearly filiform, rather longer in the *male* than half the body. Thorax twice as broad as long; apex broadly excavated; sides straight and nearly parallel, rounded and narrowed before the middle; upper surface moderately convex; disk subremotely but distinctly punctured; sides thickened, longitudinally excavated immediately within the thickened portion, the excavation itself being broad and deep on its hinder half, shallower and less distinct in front, its surface covered with subremote punctures, larger and deeper than those of the disk. Elytra much more closely and coarsely punctured than the thorax, the punctures arranged in numerous irregular ill-defined rows. The sides of the thorax vary somewhat in form in different individuals; rarely (in the *male*) they are rotundate-ampliate from the base; in the *female* they are always less straight behind the middle than in the other sex.

Chrysomela Krishnu.

C. anguste oblongo-ovata, convexa, cuprea, nitida; thorace modice convexo, disco fere impunctato, lateribus rotundatis, a medio ad basin angustatis, valde incrassatis, intus foveolatis, hic illic punctis magnis sparse impressis; elytris ovatis, postice subattenuatis, profunde gemellato-striatis, punctis purpureo-cupreis magnis inæquidistanter et remote positos in striis, striis nonnullis ponemedium omnino deletis.

Long. 4 lin.

Hab. India.

Narrowly oblong-ovate, convex, bright cupreous. Head

nearly impunctate; clypeus depressed, separated from the face by an angular grooved line, from the apex of which a longitudinal groove runs upwards to the vertex; antennæ rather longer than the head and thorax, moderately robust. Thorax twice as broad as long; sides moderately rounded, narrowed from the middle to the base; disk moderately convex, nearly impunctate, a few minute punctures being visible only under a lens; sides thickened, bounded within by an irregular longitudinal fovea, on which, and also for a short space on the outer surface of the disk, are to be seen a few deep punctures congregated in irregular rows and patches. Scutellum semiovalate, obtuse. Elytra scarcely broader at the base than the thorax, oval, somewhat narrowed towards their apex, the latter subacutely rounded; surface of each elytron with about five double rows of large coppery-purple, deep, circular impressions, placed remotely and at unequal distances in each row, but rather more crowded at the base, more distant on the hinder half of the disk, the fourth double row from the suture being there entirely obsolete; interspaces smooth, impunctate.

Chrysomela Grutii.

C. oblongo-ovata, convexa, nitido-cuprea; antennis nigris, ore tarsisque obscure virido-æneis; thorace sparse hic illic fortiter punctato, lateribus paulo incrassatis, intra marginem leniter longitudinaliter excavatis et ibi profunde varioloso-punctatis, punctis confluentibus; elytris profunde et subremote punctatis, punctis sat magnis, ad latera et pone medium in striis gemellatis dispositis.

Long. $3\frac{1}{2}$ lin.

Hab. Rangoon.

Oblong-ovate, convex, shining cupreous; antennæ black; mouth beneath and tarsi obscure metallic green. Head remotely punctured; epistome and lower portion of face depressed, the former separated from the latter by an angular groove, from the upper edge of which three grooved lines run upwards on the face—viz. one from the apex, extending to the vertex, and one on either side, short, and running obliquely outwards towards the eye. Thorax twice as broad as long; apex concavely excavated; sides slightly rounded and narrowed, more quickly rounded before the middle, above moderately convex; disk somewhat sparingly impressed with coarse, deep, irregularly congregated punctures, sides slightly thickened on the outer margin, longitudinally excavated within, the excavated portion covered with large, deeply impressed, confluent, variolose punctures. Elytra ovate, impressed with numerous subremote, large, deeply impressed punctures, confused on the anterior two-thirds of the disk, arranged on the posterior third of each elytron

in about four double longitudinal rows, the outer one extending the whole length of the elytron, just within its lateral border; interspaces smooth.

Chrysomela Bonvouloirii.

C. anguste oblonga, modice convexa, nitida, cuprea, pedibus obscure æneis; antennis nigris; thoracis disco remote punctato, lateribus paulo incrassatis profunde subvariolo-punctatis; elytris fortiter striato-punctatis, striis nonnullis pone medium obsoletis.

Var. *A. obscure ænea*.

Long. $3\frac{1}{2}$ lin.

Hab. India; collected by Mr. Bretingham.

Narrowly oblong, moderately convex, bright cupreous, nitidous; legs obscure æneous. Head punctured; epistome depressed, separated from the face by an angular line; antennæ half the length of the body, black. Thorax two and a half times as broad as long; sides rotundate-angustate from base to apex, rather more quickly narrowed in front; anterior margin broadly concave; upper surface smooth, distinctly but sparingly punctured on the disk, the punctures being irregularly crowded; sides thickened on the lateral border, a narrow band along this latter being entirely free from punctures, a longitudinal space immediately within, however, is covered with numerous large deeply impressed subvariolo-punctures, which extend also a short distance along the base of the thorax. Scutellum semi-ovate, smooth and impunctate. Elytra slightly broader than the thorax, their sides subparallel, the apex rounded; surface of each elytron covered with rows of deeply impressed punctures; on the posterior half of the surface, many of the rows are obsolete, causing the remaining rows to appear gemellate; interspaces remotely punctate; outer half of anterior disk indistinctly wrinkled transversely.

This species varies somewhat in the amount and also in the depth of the punctation of its surface.

Chrysomela Stevensii.

C. anguste oblonga, modice convexa, nitida, læte cuprea; capite, scutello pedibusque obscure æneis; antennis nigris; thoracis disco hic illic fortiter punctato, lateribus extus incrassatis, intus obsolete longitudinaliter depressis, rude variolo-punctatis, fere rugosis; elytris rude punctato-striatis, striis irregulariter dispositis.

Long. $4\frac{2}{3}$ lin.

Hab. Rangoon.

Narrowly oblong, moderately convex, bright cupreous, nitidous; head, scutellum, and legs obscure æneous. Head irregularly but not closely punctured; clypeus nearly occupied by

a narrowly ovate transverse depression; face with a longitudinal groove running down the middle; antennæ half the length of the body, black. Thorax more than twice as broad as long; sides nearly straight and parallel, subsinuate behind their middle, rounded and narrowed in front, anterior angles subacute, posterior acute; surface slightly convex, impressed here and there with deep punctures, congregated in irregular rows; sides thickened at their outer edge, broadly but obsoletely excavated within, their surface covered with large, irregular, deeply-impressed, confluent punctures. Scutellum semiovalate, subacute. Elytra broader than the thorax, subovate; surface covered with numerous irregular rows of deeply-impressed punctures; interspaces somewhat irregular, indistinctly wrinkled transversely on the anterior half of the outer disk.

This species is more coarsely and closely punctured than *C. Bonvouloirii*; the rows of punctures on the elytra are more numerous, and the general surface of the latter is irregular.

Genus AUSTRALICA, Chevr.

Australica erudita.

A. oblongo-ovata, convexa, flavo-fulva, nitida; vertice, antennis extrorsum, thoracis vittis duabus brevibus, infra apicem positis, fasciaque basali, utrinque abbreviata, medio sinuata, scutello pedibusque (femoribus anticis quatuor basi subtus exceptis) nigris; elytris punctato-striatis, nigro signatis; pectore nigro-piceo.

Long. 3 lin.

Hab. Dawson's River, Australia.

Oblong-ovate, convex, shining flavo-fulvous; the outer two-thirds of the antennæ, the vertex, two short subapical vittæ and a narrow basal fascia on the thorax, the scutellum and legs (the basal half of the under surface of the four anterior thighs excepted) black. Head broad and flat, minutely punctured; epistome scarcely distinct from the face; antennæ slender. Thorax three times as broad as long; sides rounded and narrowed from their base to their apex; upper surface convex, finely punctured, sides obsoletely excavated; lateral margin rather more coarsely punctured. Elytra broadly oblong, scarcely broader than the base of the thorax, each elytron impressed with ten rows of punctures, the first short; interspaces very minutely punctured; the suture, a curved line which, commencing at the base on the humeral callus, runs obliquely downwards and inwards to the lower edge of the basilar space, where it abruptly terminates at a short distance from the suture, a narrow wedge-shaped patch on the outer disk below the shoulder, placed parallel to the curved line, and three longitudinal vittæ on the hinder disk, the first commencing at the outer edge of the oblique line just before its

apex, running parallel to the suture, and terminating long before reaching the apex of the elytron, the other two commencing about the middle of the outer disk, connected at their base by an obliquely transverse line, the inner one extending nearly to the sutural angle, the outer one short, black. Breast nigro-piceous.

Australica (Stethomela) gibbosa.

A. subquadrata, apice subangulata, dorso valde convexa, gibbosa, nitido-cuprea; thorace hic illic punctis magnis rotundatis viridi-metallicis profunde impresso; elytris postice declivibus, utrinque apicem versus ad latus longitudinaliter excavatis, punctis magnis rotundatis remotis viridi-metallicis in seriebus decem inæquidistanter positis profunde impressis; antennis pallide flavis, articulis intermediis fuscis.

Long. $4\frac{1}{2}$ – $5\frac{1}{2}$ lin.

Hab. Dawson's River, Richmond River.

Subquadrate, subangulate at the apex of the elytra, very convex, gibbous, shining cupreous. Head broad, flat; face divided down the middle by a longitudinal groove, which extends nearly to the anterior margin of the epistome; the latter transverse, short, separated from the face by a nearly horizontal grooved line; antennæ rather more than half the length of the body, slender, filiform, pale yellow; intermediate joints fuscous. Thorax more than twice as broad as long; apex concavely excavated; sides nearly straight and parallel behind, rounded and narrowed in front; upper surface smooth, impressed here and there with irregularly congregated, large, round, deep, obscure metallic-green punctures. Elytra scarcely broader than the thorax at their base, slightly narrowed behind, conjointly angled at their apex, very convex, somewhat abruptly deflexed behind the middle; each elytron on its outer side covered with a broad but shallow depression, which extends from just before the commencement of the posterior third of the elytron, and reaches to immediately within the sutural border, leaving the apical portion of the suture itself elevated, and forming with its fellow a distinct ridge; on the surface of each elytron are ten rows of remote impressions similar to those on the thorax; they are rather larger and more deeply impressed, and are placed at unequal distances on each row; on the extreme outer border is a single row of smaller and more crowded punctures, concolorous with the disk; interspaces subremotely covered with faintly-impressed reticulations.

Genus *PLAGIODERA*, Redt.

Plagioderia Trimeni.

P. ovato-rotundata, modice convexa, nitida, læte cupreo-ænea; an-

tennis fulvis, extrorsum nigris; thorace medio longitudinaliter canaliculato; elytris irregulariter subseriatim punctatis, viridi-æneis, cupreo vix micantibus, marginibus basali et suturali limboque submarginali læte cupreis; abdominis limbo fulvo maculato.

Var. A. obscure cærulea aut nigro-cærulea; elytris viridibus, marginibus concoloribus.

Long. 3-4 lin.

Hab. Cape of Good Hope; collected by Mr. Trimen.

Ovate-rotundate, moderately convex, nitidous, bright cupreo-æneous; antennæ moderately subincrassate, fulvous, their outer half black. Thorax narrowed from base to apex; sides nearly straight, suddenly narrowed and rounded at the apex; surface of disk slightly irregular, sides indistinctly thickened, impressed here and there with a few deep scattered punctures; central portion of disk impressed with a short longitudinal groove. Elytra with their outer margin moderately dilated, its surface irregular, somewhat thickened; bright metallic green, with a slight cupreous reflexion, an ill-defined line on the sutural and basal margins, and a submarginal stripe on the outer border, bright cupreous. Sides of abdomen marked with a row of fulvous spots.

Var. A. Body obscure metallic blue or bluish black; elytra metallic green, the cupreous markings obsolete.

Plagiodera viridivittata.

P. subrotundata, modice convexa, nitida, obscure viridi-ænea; antennis nigris; thorace hic illic leviter excavato, irregulariter punctato, punctis ad latera profundius impressis; elytris irregulariter punctatis, punctis prope suturam subseriatim dispositis, cupreis, utriusque margine laterali, linea suturali vittisque duabus, plus minusve distinctis, metallico-viridibus.

Long. 4-4½ lin.

Hab. Port Natal.

Very closely allied to the last species, rather larger, more rotundate; sides of elytra obsoletely angled; thorax more deeply pitted, and more coarsely punctured; longitudinal groove on disk obsolete, sides less straight, rather more distinctly rounded; antennæ entirely black; abdomen without the marginal spots.

Plagiodera cinctipennis.

P. rotundata, convexa, fulva aut pallide rufo-fulva, nitida; elytris punctatis, punctis subseriatim dispositis, obscure æneo-cupreis, fulvo marginatis; antennis extrorsum nigris.

Long. 2½ lin.

Hab. India; collected by Mr. Bretingham.

Rotundate, moderately convex, nitidous; antennæ short, sub-

incrassate, their outer half black. Thorax rounded on the sides, narrowed in front. Elytra distinctly punctured, the puncturing varying in depth in different individuals, indistinctly arranged in irregular rows.

Genus GONIOCTENA, Redt.

Gonioctena scutellaris.

G. oblonga, modice convexa, fulva, nitida, pectore pedibusque (femoribus quatuor anticis basi exceptis) nigro-piceis; antennis extorsum scutelloque nigris; elytris regulariter punctato-striatis.

Long. 3 lin.

Hab. Northern China.

Oblong, convex. Head coarsely punctured; epistome depressed, separated from the face by an angular groove, from the apex of which a short, ill-defined, longitudinal depression runs upwards on the face; antennæ scarcely longer than the head and thorax, their outer two-thirds black. Thorax more than twice as broad as long; sides angustate-rotundate from base to apex; disk distinctly but finely punctured, sides coarsely punctate. Scutellum nearly semirotnundate, shining black. Elytra scarcely broader than the base of the thorax, sides below the shoulders slightly excavated; each elytron impressed with eleven regular rows of punctures, the first short; interspaces plane, minutely but not closely punctured. Body beneath deeply punctured; abdomen obscure fulvous, its puncturing subremote.

Gonioctena thoracica.

G. oblonga, convexa, nigra, nitida, thorace facieque inferiore obscure rufis; antennarum basi fulva; elytris regulariter punctato-striatis.

Long. $2\frac{1}{2}$ lin.

Hab. Northern China.

Very similar to the preceding, but (with the exception of the entire thorax above, together with its sides beneath, the lower portion of the face, and the base of the antennæ) entirely black. Head less coarsely punctured; the longitudinal depression on the face is wanting, but replaced by two indistinct grooves, which run one on either side obliquely upwards from the apex of the epistome; antennæ thicker towards their apex than in *G. scutellaris*.

Gonioctena æneipennis.

G. oblonga, convexa, testacea, nitida; elytris viridi-metallicis, punctato-striatis, punctis in striis ad latera minus regulariter dispositis; antennis flavis; scutello nigro.

Long. $2\frac{3}{4}$ lin.

Hab. Northern China.

Oblong, convex, shining testaceous; elytra bright metallic green, punctate-striate, the punctures less regularly placed on the striæ on the outer disk than in the foregoing species; face somewhat broader, slightly swollen, irregularly punctured; epistome separated from the face by a nearly semicircular groove, the middle of which is slightly produced upwards and angular.

Gonioctena rubripennis.

G. oblonga, convexa, nigra, nitida; elytris punctato-striatis, sordide rufo-fulvis; antennis basi fulvis.

Long. $2\frac{1}{2}$ –3 lin.

Hab. Japan.

Oblong, convex, shining black; elytra obscure rufo-fulvous. Thorax at the base more than twice as broad as long; sides narrowly margined, rotundate-angustate, all the angles acute; above convex, sparingly covered with fine punctures on the disk; sides coarsely and more closely punctured, their outer edge, just within the lateral border, slightly thickened. Scutellum semi-ovate. Elytra scarcely broader than the base of the thorax; sides subparallel; apex regularly rounded; above convex, transversely depressed on the disk below the humeral callus; each elytron impressed with eleven regular rows of distinct punctures, the first abbreviated, interspace between the tenth and eleventh rows slightly thickened, the others flat, subremotely covered with fine but distinct punctures; under surface of body coarsely punctured.

Gonioctena nigro-plagata.

G. oblonga, convexa, fulva, nitida; elytris punctato-striatis; scutello elytrorumque puncto apicali plagisque octo, 4 vix infra basin, 4 pone medium, transversim positis, nigris.

Var. A. elytrorum maculis inter se confluentibus, facie inferiore piceo tincta.

Long. 3– $3\frac{1}{2}$ lin.

Hab. Japan.

Oblong, convex. Thorax more than twice as broad as long, sides rotundate-angustate, very narrowly margined, posterior angles acute, the anterior subacute; above convex; sides coarsely punctured, a narrow space just within the outer border thickened, impunctate; disk remotely punctured; medial line near the base impressed with a short longitudinal groove. Elytra similar in form and sculpture to the preceding species, the punctures being, however, rather coarser and somewhat less regularly placed on the striæ; each elytron marked with a small spot at the sutural angle and four large patches on the disk, shining black; these latter, which vary in shape, are placed in two transverse rows,

viz. one immediately below the base and extending nearly to the middle, the other just below the middle; the two outer spots are generally elongate, and sometimes form a submarginal vitta, interrupted in its middle.

V.—*Revision of the Natural Order Bignoniaceæ.*

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BEFORE proceeding to publish the results of my examination of Bignoniaceæ, I shall give a list of all the genera I hold to be true members of the order. They will have to be grouped very differently when the whole of them shall have been subjected to closer investigation, and a number of new ones added. The two tribes Eubignoniæ and Catalpeæ, founded upon important carpological characters, must stand, and a third one (Jacarandææ) be added to them.

I. *Eubignoniæ*, having a marginicidal fruit, and a septum placed parallel with the direction of the valves of the capsule.

II. *Catalpeæ*, having a loculicidal fruit, and a septum placed contrary to the direction of the valves of the capsule.

III. *Jacarandææ*, having a marginicidal fruit, and a septum placed contrary to the direction of the valves of the capsule.

From the subjoined it will be seen that all *cirrhose* Bignoniaceæ are confined to America, and that, with only one exception (*Dolichandra*), they are Eubignoniæ; again, that, with the exception of two Asiatic genera (*Millingtonia* and *Calos-anthes*) all the *erect* Bignoniaceæ belong to Catalpeæ and Jacarandææ.

Synopsis generum Bignoniacearum.

Tribus I. EUBIGNONIEÆ.

Capsula marginicida, septum valvis parallelum.—Frutices scandentes cirrhosi Americani, rarissime arbores Asiaticæ.

Divisio I. *Monostictides*.

Semina ad quodque septi latus uniserialia.

* Frutices scandentes cirrhosi Americani.

Bignonia, Tournef. Amer. trop.

Pachyptera, Mart. Amer. trop.

Fridericia, Mart. Amer. trop.

Cydistia, Miers (*Barteria*, Seem., non Hook. fil.). Amer. trop. et subtrop.

Cuspidaria, DeCand. Amer. trop.

Macfadyena, DeCand. (*Spathodea*, sp. auct.). Amer. trop.

Lundia, DeCand. Amer. trop.

Mansoa, DeCand. Amer. trop.